#### **Presentation for actuarial students**

March 26, 2014



### Agenda



- Who is QBE Re (Europe) Secura Branch?
- Traineeships and master theses

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- Traineeships and master theses

### **QBE - In a nutshell**



- Australian listed company
- Group Head office based in Sidney
- Operates in 48 countries throughout the world
- Established in 1886, now with over 16,500 employees worldwide
- Three operating divisions
  - Australia Asia Pacific
  - European Operations
  - The Americas



- Specialist in every line of business
- One of the world's leading insurers and reinsurers

## **QBE - Figures at 31/12/2012**



- Premium
  - GWP: US\$ 18.4 bn
  - NEP: US\$ 15.8 bn
- Shareholders' funds: US\$ 6.99 bn
- Market capitalisation (2013): US\$ 17.1 bn
- S&P Rating: A+







# QBE Re (Europe) – Secura Branch: key elements



- Professional reinsurance company
  - Established in 1946
  - Location: Brussels
  - European reinsurer
    - Life and non-life business
    - Split prop/non-prop: 40%/60%
- Single shareholde
- Premium income 2013 : GWP: € 237.6m
- S&P rating: A+
- 'Optimal' business approach
  - Strategy focused on minimum required ROE ...
    - ... based upon strong customer relations ...
    - ... built on professionalism: technical expertise, quality staff, efficient organization

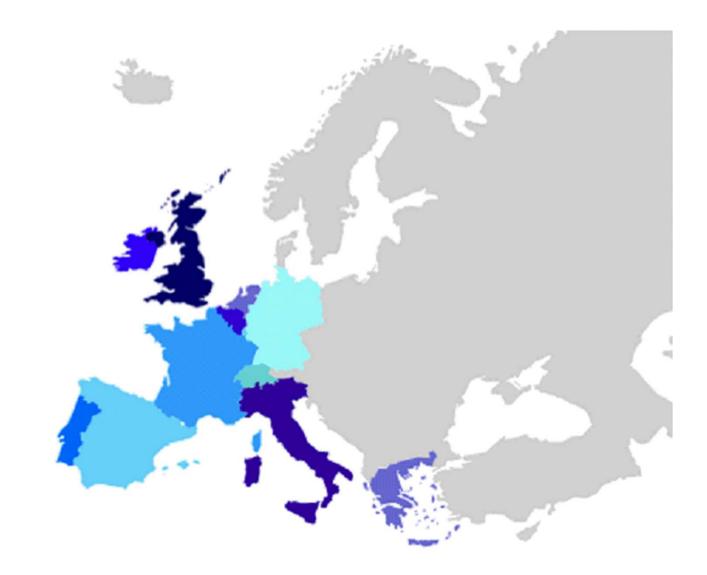
## Staff



- 91 (87 FTE)
- 57 % of university degrees
  - Actuaries (17)
  - Economists
  - Engineers
    - Applied mathematics
    - Civil
    - Commercial
  - Mathematicians
  - PhD's
    - Actuarial sciences
    - Economics
    - Mathematics
    - Physics
    - Statistics
  - Physicists

#### **Markets**





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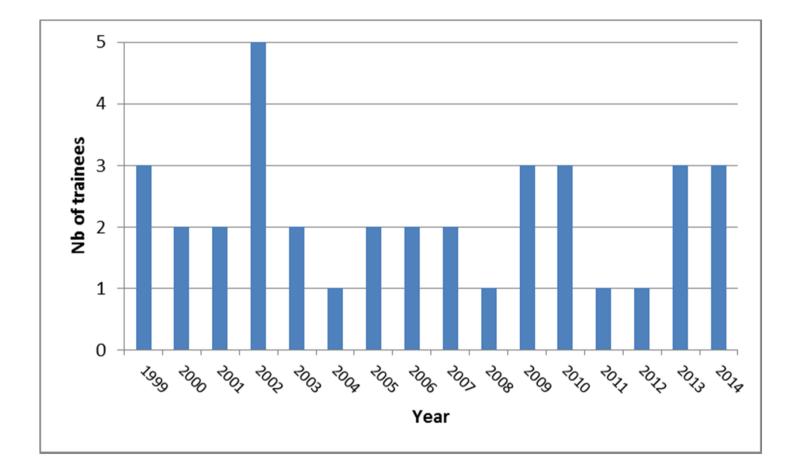
### **Scope of practical research**

QBE

- Development of pricing tools
  - From a theoretical modelling ...
    - Extreme value theory, dependence concepts,...
  - ... To a user-friendly interface
    - Implementation in SAS
- Economic value management (EVM)
  - How much capital do we need?
  - How much capital should we allocate to a particular contract?
  - Diversification effects / dependence?
  - Optimal portfolio
- Natural catastrophe modelling
  - Pricing purposes
  - Follow-up of accumulation
  - Securitization
- New products
  - Multiline aggregate XL covers
  - Mitigation of reserve risk (LTP, ADC)
  - Epidemic risk







## Introduction



- Traineeships and/or master theses are possible
- Supervised by a member of the R&D department or a member of the underwriting cell
- Any relevant subject can be defined in collaboration with the student
- Win-win situation
- Qualities of the ideal candidates
  - Good technical and analytical skills
  - Dynamic, rigorous, show initiative, creative, curious and productive
  - Good knowledge in English are required
  - Motivated!
- IT requirements
  - Experience with programming in SAS is an advantage
  - Ability to learn fast for programming in SAS is a prerequisite

## **Examples of past traineeship projects**



- Reservation methods, a stochastic approach for big claims
- Estimation de la superinflation dans les grands sinistres RC Auto.
- Hail risk modelling
- Modelisation of Rate On Line curves
- Modélisation des grands sinistres en RC Auto
- Cotation des traités XS par simulation
- Couverture naturelle des risques de mortalité et de longévité
- Réflexion actuarielle sur le risque de pandémie grippale
- Superinflation par poste dans les sinistres RC Auto en France
- Reinsurance deposits
- Risk factors for large claims in MTPL
- Utilisation de la crédibilité en réassurance dans le cadre des traités RC Auto

• ...

### What if interested?



- Simply send a letter of motivation with your CV
  - <u>inl@secura-re.com</u> (HR manager)